5

10

ABSTRACT OF THE DISCLOSURE

A method for interference mitigation in a wireless communication system having multiple transmitters and receivers by introducing transmission time delays between the transmission of signals from the individual transmitters to ensure coherent reception of the signals at a specific point in the coverage area, such as at a center of distribution of the receivers. To further aid in interference mitigation the signals are assigned training patterns chosen to be distinguishable by the receiver and to optimize interference mitigation. The training patterns can be selected based on a feedback parameter, e.g., a measure of the quality of interference mitigation obtained from the receiver. The present method can be used in wireless communication systems which re-use frequencies including TDMA, CDMA, FDMA, OFDMA or other multiplex communication systems using a multiple access method or a combination of such methods.